# Class Title: Electronics Technician II

#### **BRIEF DESCRIPTION OF THE CLASSIFICATION:**

Performs repairs, preventative maintenance and calibration to electronic instrumentation, controls, telemetry and computer equipment. Installs parts. Gathers information. Maintains exhibits. Performs supervisory duties. Repairs computers. Performs as a projectionist.

#### **ESSENTIAL FUNCTIONS:**

This information is intended to be descriptive of the key responsibilities of the classification. The following examples do not identify all duties performed by any single incumbent. Specific requirements of individual positions are described in the Job Description.

	Physical Strength Code	ESSENTIAL FUNCTIONS
1	M	Performs repairs, preventative maintenance and calibration by conducting various tests on equipment to check and adjust instrumentation, controls and telemetry, installing new devices after checking calibration, interpreting electrical drawings and technical manuals and reading electrical and pneumatic signals.
2	M	Installs parts by using hand tools, testing equipment, electrical drawings and technical manuals, testing operation of parts, completing work order and inputting work order data.
3	S	Gathers information by discussing equipment malfunction with customer, consulting with manufacturer regarding equipment modifications and repair and interacting with local companies to determine approach to repair problem with equipment.
4	L	Maintains exhibits by troubleshooting electronic and electromechanical faults, replacing failed parts, retrofitting, redesigning and creating new parts, ordering and installing new components and performing preventative maintenance.
5	S	Performs supervisory duties by providing guidance, support and training, planning and developing schedules, ordering and allocating resources, maintaining inventory and coordinating with vendors and other departments.
6	L	Repairs computers by troubleshooting staff computers, repairing faults, consulting with information systems to make repairs, loading software, upgrading hardware and procuring new equipment.
7	L	Performs as a projectionist by operating projectors, platter systems and audio dubbers, performing preventative maintenance on equipment, ordering and replacing parts and building-up, taking down and showing movies.

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# **CLASS REQUIREMENTS:**

	CLASS REQUIREMENTS
Formal Education / Knowledge	Work requires knowledge of a specific vocational, administrative, or technical nature which may be obtained with six months/one year of advanced study or training past the high school equivalency. Junior college, vocational, business, technical or correspondence schools are likely sources. Appropriate certification may be awarded upon satisfactory completion of advanced study or training.
Experience Certifications and Other Requirements	Two years experience in electronics or as an Electronics Technician.  Valid Driver's License
Reading	Work requires the ability to read technical manuals, electrical diagrams, work orders and computer software.
Math	Work requires the ability to perform general math calculations such as addition, subtraction, multiplication and division.
Writing	Work requires the ability to write general correspondence and fill out work orders.
Managerial	Managerial responsibilities include having planning and technical problem- solving skills.
Budget Responsibility	N/A
Supervisory / Organizational Control	Work requires the occasional direction of helpers, assistants, seasonal employees, interns, volunteers or temporary employees.
Complexity	Work requires analysis and judgment in accomplishing diversified duties.  Work requires the exercise of independent thinking within the limits of policies, standards, and precedents.
Interpersonal / Human Relations Skills	Contacts others within the organization. These contacts may involve similar work units or departments within the City which may be involved in decision making or providing approval or decision making authority for purchases or projects. Works with individuals outside the City who may belong to professional or peer organizations. Vendors and suppliers may also be called upon for information on purchases, supplies or products. Working with various state and federal agencies may also be required. Meetings and discussions may be conducted with customers, brokers and sales representatives.

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# **OVERALL PHYSICAL STRENGTH DEMANDS:**

Sedentary	Light X	Medium	Heavy	Very Heavy
S = Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time	L = Light Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree.	M = Medium Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly.	H = Heavy Exerting 50-100 lbs. occasionally, 25-50 lbs. frequently, or up to 10-20 lbs. constantly.	VH = Very Heavy Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly.

### **PHYSICAL DEMANDS:**

C = Continuously	F = Frequently	O = Occasionally	R = Rarely	N = Never
2/3 or more of the time.	From 1/3 to 2/3 of the time.	Up to 1/3 of the time.	Less than 1 hour per week.	Never occurs.

This is a description of the way the job is currently performed; it does not address the potential for accommodation.

PHYSICAL	FREQUENCY	
DEMANDS	CODE	DESCRIPTION
Standing	F	Equipment maintenance and repair
Sitting	O	Computer, desk work, answering telephone, meetings
Walking	F	To/from equipment maintenance and repair, to/from vault area
Lifting	0	Lift vault hatches, light weight equipment, tools, generators, testers and testing equipment, calibrators, meters, electrical drawings, technical manuals
Carrying	F	Lift vault hatches, light weight equipment, tools, generators, testers and testing equipment, calibrators, meters, electrical drawings, technical manuals
Pushing/Pulling	R	While setting up various mechanical equipment
Reaching	F	Tools or equipment
Handling	F	Lift vault hatches, light weight equipment, tools, generators, testers and testing equipment, calibrators, meters, electrical drawings, technical manuals
Fine Dexterity	0	Computer keyboard, writing, working with small components
Kneeling	F	While observing, inspecting or installing electronic, electrical equipment
Crouching	O	While observing, inspecting or installing electronic, electrical equipment
Crawling	O	While observing, inspecting or installing electronic, electrical equipment
Bending	O	While observing, inspecting or installing electronic, electrical equipment
Twisting	R	While observing, inspecting or installing electronic, electrical equipment
Climbing	О	In/out of vaults, ladders, lifts
Balancing	O	On pipes, ladders
Vision	С	Computer, desk work, color vision for wiring, writing, reading, equipment maintenance or repair, installation of parts
Hearing	С	Telephone, co-workers, staff, supervisor, mechanical and equipment noises
Talking	F	Telephone, co-workers, staff, supervisor
Foot Controls	F	Driving, operation of equipment
Other (specify)	N	

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### MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:

Multimeter, signal generator, frequency meter, signal tracer, pressure tester, oscilloscope, confined space monitor, handheld programmers, manometer, hand tools, turbidity calibrator, electrical drawings, lime machine calibrator, mastermeter, telephone, tone tester, city radio, motor vehicle, computer, Standard Windows and Office software, supervisory control and data acquisition (SCADA) for instrumentation and equipment control

### **ENVIRONMENTAL FACTORS:**

D = Daily	W = Several	M = Several	S = Seasonally	N = Never
	Times Per Week	Times Per Month		

HEALTH AND SAFETY	ENVIRONMENTAL FACTORS		
Mechanical Hazards	W	Dirt and Dust	D
Chemical Hazards	W	Extreme Temperatures	W
Electrical Hazards	D	Noise and Vibration	M
Fire Hazards	M	Fumes and Odors	M
Explosives	N	Wetness/Humidity	W
Communicable Diseases	N	Darkness or Poor Lighting	S
Physical Danger or Abuse	N		
Other (see 1 below)	N		

PRIMARY WORK LOCA	ΓΙΟΝ
Office Environment	
Warehouse	
Shop	X
Vehicle	
Outdoors	X
Other (see 2 below)	X

#### **PROTECTIVE EQUIPMENT REQUIRED:**

Respirator, safety glasses, gas sniffer for OSHA defined confined spaces

### **NON-PHYSICAL DEMANDS:**

C = Continuously	F = Frequently	O = Occasionally	R = Rarely	N = Never
2/3 or more of the time.	From $1/3$ to $2/3$ of the time.	Up to 1/3 of the time.	Less than 1 hour per week.	Never occurs.

NON-PHYSICAL DEMANDS	_
Time Pressures	О
Emergency Situations	О
Frequent Change of Tasks	R
Irregular Work Schedule/Overtime	О
Performing Multiple Tasks Simultaneously	O
Working Closely with Others as Part of a Team	O
Tedious or Exacting Work	О
Noisy/Distracting Environment	O
Other (see 3 below)	N

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<sup>(1)</sup> 

<sup>(2)</sup> Various City facilities/worksites